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Henry Haverinen

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NOKIA CORPORATION

c/o Ware, Fressola, Van Der Sluys & Adolphson LLP

Building Five, Bradford Green

755 Main Street, PO Box 224

Monroe, CT 06468

EXAMINER

DAILEY, THOMAS J

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/659,774  
Filing Date: September 10, 2003  
Appellant(s): HAVERINEN ET AL.

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Keith R. Obert  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/27/2011 appealing from the Office action mailed 1/4/2011.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief, as stated supplemental filing of 7/25/2011, is correct.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

2003/0176188	O'Neill	9-2003
2002/0133719	Westerdal	9-2002
2003/0163733	Barriga-Caceres et al	8-2003

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US Pub. No. 2003/0176188) in view of Westerdal (US Pub. No. 2002/0133719).

3. As to claim 1, O'Neill discloses a method, comprising:

receiving a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device);

transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the

NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device);

receiving a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name uniquely identifying the authentication server ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a “reauthentication identity”) reads upon “a request for reauthentication” as the end node was previously authorized by its home authentication server, as that server stores its service profile);

wherein the request for reauthentication is routed to the authentication server according to the unique realm name included in the request for reauthentication ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Westerdal discloses transmitting a reauthentication identity to a terminal in response to an authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9); further this is a reauthentication identity as it is used in subsequent

authentications as described in [0036], i.e. if the cookie contains a known APID has already gone through the processes described in [0037])).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal because the substitution of one known element (i.e. Westerdal's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for network devices, i.e. the end result of both Westerdal and O'Neill) to one of ordinary skill in the art.

4. As to claims 4, 7, 13, 15, and 20, they are rejected by the same rationale set forth in claim 1's rejection.

5. As to claim 10, O'Neill discloses a system comprising:

a first authentication server configured to receive a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (first authentication server) (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device), and configured to transmit to the terminal a reauthentication identity including a unique realm name uniquely identifying the first authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and

identifies the home authentication server; that realm name inherently is transmitted to the mobile device); and

a second authentication server configured to receive a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name identifying the first authentication service ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a “reauthentication identity”) to a visited AAA server (second authentication server) reads upon “a request for reauthentication” as the end node was previously authorized by it's home authentication server, as that server stores it's service profile), and configured to route the request for reauthentication to the first authentication server according to the unique realm name identifying the first authentication server ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Westerdal discloses transmitting a reauthentication identity to a terminal in response to an authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9); further this is a reauthentication identity as it is used in subsequent



authentications as described in [0036], i.e. if the cookie contains a known APID has already gone through the processes described in [0037])).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal because the substitution of one known element (i.e. Westerdal's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for network devices, i.e. the end result of both Westerdal and O'Neill) to one of ordinary skill in the art.

6. As to claims 27 and 29, O'Neill discloses a method for use by a terminal, they are rejected by the same rationale set forth in claim 10's rejection
7. As to claim 24, O'Neill discloses wherein the authentication network element is an authentication server (Fig. 5, label 114).
8. As to claim 25, O'Neill discloses wherein the authentication network element is a proxy server (Fig. 5, label 135).
9. As to claim 26, O'Neill discloses wherein the authentication network element is a service access point for authentication by an authentication server (Fig. 5, label 128).

10. Claims 14 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill in view of Westerdal as applied to claims 13 and 20 above, and in view of Barriga-Caceres et al (US Pub No. 2003/0163733), hereafter "Barriga."

11. As to claims 14 and 21, O'Neill and Westerdal do not explicitly disclose wherein the means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name includes the reauthentication identity in an identity response packet according to an Extensible Authentication Protocol.

However, Barriga discloses an authentication system (Abstract) that utilizes an Extensible Authentication Protocol ([0101]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal with Barriga in order to utilize a well-known protocol in the art that would allow O'Neill's system to be compatible with other, already deployed, systems.

## **(10) Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

(1) The appellant argues with respect claim 1 that the combination of O'Neill and Westerdal fails to disclose or suggest "transmitting a reauthentication identity to a

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terminal in response to a request for full authentication". Specifically, the appellant contends O'Neill fails to disclose transmitting to a terminal a reauthentication identity at all, let alone *in response to a request*. The appellant asserts O'Neill (in [0053]) only discloses that the mobile node ("terminal") may send an identity to the network, since message 550 is directed towards the Remote Home Agent 112 of the MN 202 in the home domain 1102, but it is first sent to the access router 128 as message 550a and it is then sent to the remote home agent 112 as message 550b. That message 550 includes a network access identifier ("reauthentication identity") having a user part and a realm part, however the message 550 is sent towards the Remote Home Agent 112, and therefore is not transmitted to the terminal, as recited in claim 1.

**In reply to argument (1)**, O'Neill discloses transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server ("unique realm name"); it is essential that the realm name is transmitted to the mobile device). That is, O'Neill discloses transmission of a reauthentication identity to a terminal in a broad sense, but, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is *in response* to the request for the full authentication of terminal. One of ordinary skill in the art would appreciate and see that the mobile node ("the terminal") of [0053], at some point in the authentication/authorization process with the home AAA server, will receive that server's

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identity. Simply put, how else would that particular mobile node be aware of its home AAA server, a server that has already in fact authenticated the device? O'Neill is seemingly silent with this original authentication/authorization because O'Neill is more concerned with the roaming and reauthentication of the mobile nodes when they are away from their home AAA server (see Abstract, [0010]-[0012]) and this is why O'Neill reads on the remainder of the claim which deals with these reauthentication requests.

The Westerdal reference was relied upon to disclose transmission in response to a specific request as elaborated on below in response to argument (2).

(2) The appellant contends that Westerdal fails to make up for the perceived deficiencies of O'Neill as Westerdal is silent regarding any reauthentication that includes a reauthentication identity with a unique realm name uniquely identifying the authentication server, and that the request for reauthentication is routed to the authentication server according to the unique realm name included in the request for reauthentication, as recited in claim 1.

**In reply to argument (2)**, the examiner notes one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references as O'Neill was relied upon to disclose a reauthentication identity with a unique realm name uniquely identifying the authentication server and the request for reauthentication is routed to the authentication server according to the unique realm

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name, see Grounds of Rejections. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Specifically with regard to the combination of O'Neill and Westerdal, O'Neill disclosed the claimed invention aside from the transmission to the terminal of the reauthentication identity *is in response* to the request for the full authentication of terminal (see response to argument (1) and Grounds of Rejection for the remainder of the claim). Rather, O'Neill discloses at least the terminal has a reauthentication identity with a unique realm name and the terminal is fully authenticated, but is silent in regards to the order in which those steps occur.

Westerdal was relied upon to disclose transmitting a reauthentication identity to a terminal in response to an authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9)). Further this is a reauthentication identity as it is used in subsequent authentications as described in [0036] (i.e. if the cookie contains a known APID then the client has already gone through the processes described in [0037]) and thus the client is being "reauthenticated."

The appellant's remaining arguments hinge upon the above arguments.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Thomas J Dailey/

Primary Examiner, Art Unit 2452

Conferees:

/DOHM CHANKONG/  
Primary Examiner, Art Unit 2452

/THU NGUYEN/  
Supervisory Patent Examiner, Art Unit 2452